ERI Messages

The function and use of the respective electronic reporting messages and an explanation of the user requirements of the messages

1. Revision overview

Version	Date	Description
Corrections and amendments		
A(1)ERI draft AdL	15-05-2006	First draft for ERI and RIS
A(2)ERI version 1 AdL	01-05-2007	Version 1 for ERI and PROTECT
A(2) ERI draft version 1.2 AdL-PFO-BB	09-07-2008	Second draft for ERI
A(3) ERI draft version 1.4 AdL-PFO-BB	19-09-2008	Third draft for ERI
A(4) ERI version 2.1 AdL-PFO	25-4-2009	Version 2.1 for ERI
A(5) ERI version 2.2 AdL-PFO	20-5-2009	Version 2.2 including remarks
A(6) ERI version 2.3 AdL-PFO	2 – 6- 2009	Version 2.3 including commercial container messages

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2. Management overview

Summary,
This document is meant to provide a general overview of the various messages their function and usage and an explanation regarding the mutual dependencies. It can be used to create awareness and to explain the relationships between the messages.
The messages are used and required for a number of reasons:
1 for reporting purposes to the respective competent authorities,
2 to ensure that the data to be reported is electronically available to the reporting parties
3 to support the tendency to decrease administrative procedures and replace documents by electronic data.

Messages used for electronic reporting in inland waterway transport are divided in messages meant for the competent authorities, messages meant for the next party in the transport chain e.g. terminal and messages for commercial purposes such as a transport order.
The present scenario for the respective messages is as follows:

1 A transport order in the form of an IFTMIN-BICS message is given by the shipper to the Barge operator. This message will contain all particulars regarding the cargo respectively containers to be loaded and any further requirements for the transport.
2 The reporting of a voyage-plan or schedule may be done through the ERIVOY (IFTSAI) message.
3 The barge operator will make a pre-load list and the cargo is stowed on board often using a stowage application resulting in a stowage plan.
4 Upon starting the voyage the skipper will report all particulars regarding the voyage, ship and (hazardous) cargo to the waterway authorities, using the ERINOT message. Where required the skipper will receive a confirmation in the form of an ERIRSP message that this message has been received and processed by the waterway authorities.
5 Where applicable the skipper may send an BERMAN message to the port authorities stating the purpose and service requirements for the call to the port to comply with the security (SOLAS ISPS) regulations.
6 The skipper may also send a manifest message in the form of an ERIMAN (CUSCAR) message to all other competent authorities such as Customs, Immigration, Police and Statistical offices, this message contains all details of the cargo carried including necessary permits for the carriage of specific cargo.
7 Moreover details of passengers and crew may be reported through the passenger list respectively crew list message (PAXLST)
8 Stores and especially bonded stores can be reported to the authorities through the INVRPT message.
9 The reporting of waste on board and control including requests for the use of the Port reception facilities is done through the WASDIS message.
10 For all messages the APERAK message can be used to acknowledge receipt of the data in the referred message.

3. Preamble

It is becoming increasingly clear that to ensure unambiguous use of the reporting facilities as agreed under the Directive on River Information Services (RIS), there is a need to clarify when a certain message should be used and the function and application of the respective electronic messages used for electronic reporting at present and in future. The RIS directive states in this respect that: “Member States shall take the necessary measures to implement RIS and shall enable, as far as ship reporting is required by national or international regulations, the competent authorities to receive electronic ship reports on the voyage and cargo data of ships”.
In cross-border transport, this information shall be transmitted to the competent authorities of the neighbouring state before the arrival of the vessels at the border.

In order to harmonise the usage of messages and to clarify the functions of the various standards used for reporting voyage and cargo data in inland navigation, this document has been drafted to explain the used standards and to ensure that the used messages are in line with the ones used in the maritime industry and applied in line with their purpose.
As there have been several requests for clarification of the messages as such, this document should be seen as guidance and as an attempt to clarify the function and usage of the various messages for the electronic exchange of data in inland river traffic and transport.

As has been defined in the RIS directive, River Information Services means the harmonised information services to support traffic and transport management in inland navigation, including interfaces to other transport modes. RIS does not deal with internal commercial activities but is open for interfacing with commercial activities.
RIS comprise services such as fairway information, traffic information, traffic management, calamity abatement support, information for transport management, statistics and customs services and waterway charges and port dues.
For reasons of clarity and consistency the respective version numbers of the message implementation manuals have not been mentioned in this document.

4. Introduction

Information and Communication Technology (ICT) means are rapidly developing into a well accepted way for the exchange of information between governmental agencies and the private sector. Paperless transport is becoming a real possibility and with the RIS Directive a number of important steps have been taken to introduce electronic reporting. It is therefore of the utmost importance that the used standards are clear and unambiguous.
To facilitate international inland waterway transport and to ensure that adequate controls are carried out, a free flow of data across borders and among the parties involved in International transport operations is of the utmost importance.

As has been indicated in the RIS Directive the technical specifications for electronic ship reporting in inland navigation shall respect the following principles:

1. the facilitation of the electronic data exchange between the competent authorities of the Member States, between participants in inland as well as maritime navigation and in multimodal transport where inland navigation is involved.
2. the use of a standardised transport notification message for ship-to-authority, authority-to-ship and authority-to-authority messaging in order to obtain compatibility with maritime navigation.

It is quite common that the responsibilities, tasks and functions of the respective authorities in the various countries do differ and also the requirements for data and information are different based on the responsibilities of those competent authorities.
The IMO SOLAS convention with its ISPS code has increased the requirements for certain information especially in sea ports, whilst customs authorities do in line with the European Transit system (NCTS) also require specific information. Immigration authorities do want to know the persons who are travelling in their jurisdiction and in case of calamities information on people and cargo is necessary and important to take appropriate action. That is why the various used messages in the following paragraphs are divided in messages only meant for reporting in inland waterways, and messages necessary for the various competent authorities and commercial activities.

Usage of XML

Whilst the messages are indicated through their UN acronyms it should be clear that any message mentioned can be send using XML (eXtended Markup Language), UN EDIFACT or any other syntax as long as the data standards and the used codes and references are in line with ISO 7372 Trade Data Elements Directory and the UN ECE code lists and in line with the guidelines and message user guides with the specific codes as indicated in the ERI Guide version 2.0 and its attachments

Whenever there is a question about sequence of data and naming conventions, the UN EDIFACT directory and the relevant ERI implementation manual should be leading. One of the most important aspects when using electronic messages is that information should only need to be send once. The use of functional messages containing only the necessary and required data will lead to a further simplification and harmonisation of the various processes and procedures.

An XSD for the ERINOT message has been accepted by ERI as the de facto standard for the exchange of the XML reporting message. This XSD has been published on the ERI website.

5. Messages used for RIS authorities

5.1 The ERINOT message:

The ERINOT message is the mandatory message for the reporting of voyage and cargo details (dangerous as well as non-dangerous goods) by a ship sailing on inland waterways to the competent waterway authority and where applicable the port authority. The message is also used for the exchange of information between the competent waterway authorities mutually and between port and inland waterway authorities.

Details

- The ERINOT message is a specific use of the UN/EDIFACT 'International Forwarding and Transport Dangerous Goods Notification (IFTDGN)' message such as has been developed within the PROTECT organisation. The message is therefore suitable in areas such as ports and harbours with mixed sea and inland waterway transport for reporting of dangerous and non dangerous cargo.
- The ERINOT message is based on the UN/EDIFACT directory 98.B and the Protect implementation manual version 1.0.
- Where reporting is mandatory and if technically feasible, an ERI notification message is to be composed and sent to the competent authority for each inland waterway transport. However vessels are invited to report electronically to the competent authorities whenever possible.
- The ERI notification message (ERINOT) must be used for the reporting of voyage related information, and the dangerous and non dangerous cargo carried on board of vessels sailing on inland waterways.
- In accordance with the CCR regulation on e-reporting, the use of the ERINOT message is mandatory for container transport as from 2009 for the reporting of more than 20 containers.
- The user manual of the ERINOT does include all accepted changes up to march 2007 requested for this message any other requirements for changes should be dealt with through the procedures indicated in the ERI data maintenance and management procedures.

  The notification message is used for the following purposes:
  - transport notification from vessel to authority from ship to shore;
  - transport notification from carrier to authority from shore to shore;
  - passage notification from authority to authority between authorities;

5.2 The BERMAN message:

The BERMAN message is not to be used by the inland waterway authorities, The BERMAN contains no additional information concerning voyage and cargo necessary for inland waterway authorities to fulfil their obligations.
The BERMAN II message containing ISPS information is mandatory for inland waterway transport in ports/terminals under the IMO SOLAS ISPS regime when the ISPS-code for the relevant location is higher than one.
The respective ports and terminals have already indicated that under those circumstances any vessel not having sent a BERMANII message in advance will be refused entry into the port.

Details:
The BERMAN II message is sent by the vessel before arriving at or departing from a berth or a port giving particulars about the time of arrival, the services required and any particulars necessary to ensure prompt handling of procedures and facilitating controls. The message incorporates the security information requirements for ports under the IMO SOLAS ISPS regime.
The message covers the (legal) requirements regarding the notification of a ship to a port. It supports one request for the ship - be it for entering the port, berthing on arrival of the ship, leaving the berth on departure of the ship or shifting of berths for the ship within the port or for only transiting through the port area. The arrival and transit notification contains all details regarding the movement of the ship from outside the port area to the first berth in the port area or in case of transit traffic to the point where the vessel is leaving. Required additional services to be arranged for arrival at a berth may be specified. The ETA at the entry point and where required leaving point and previous place of call of the ship are required information elements. The Berth Management message combines the pre-arrival notification and general declaration into one single notification. The BERMAN II is based on the EDIFACT message BERMAN from the UN/EDIFACT D04B directory. The implementation manual and guidelines are based on the guidelines as given by the Protect group of ports.
The message is therefore suitable to relay ISPS information and should be used where applicable and required in areas such as ports and harbours with mixed sea and inland waterway transport for reporting security information. Or where required to inland ports and terminals under the SOLAS ISPS code regime or any other security regime. The message can also be used if the possibility exists to notify a terminal of the ETA and the required services.

5.3 The Response messages:

The response message is generated by for instance a RIS centre.

Response messages are derived from the UN/EDIFACT standard APERAK message. The ERIRSP messages on the respective functions (new, modification or cancellation)of the ERI notification message ERINOT, do all have the same structure.
The message can be used as an indication that the reporting message has been received by the competent authorities and as such also serves as a proof of receipt of the reporting message by the competent authority. It is recommended that each ERINOT message is answered by an ERIRSP but the answering message may also be used for receipt confirmation of the BERMAN, PAXLST, ERIMAN and any other messages that are used.
It is recommended that any message send is confirmed by a response message.
The response on a modification or a cancellation contains information whether or not the modification or cancellation has been processed by the receiving system.

The syntax and service report message (CONTRL) is used for syntactically acknowledging or rejecting, with error indication, a received UN/EDIFACT message and to list any syntactical errors or unsupported functionality contained therein.
A CONTRL message can be used to indicate the receipt of an interchange.
The CONTRL message has 5 segments:
UCD Data element error indication, UCF Group response, UCI Interchange response, UCM Message/package response, UCS Segment error indication
UNH Message header, UNT Message trailer
During a syntactical check, the interchange, or part of it, is checked for compliance with:

- The EDIFACT syntax rules (ISO 9735) including rules for use of service segments,
- The syntactical aspects in specifications for the message type received, and
- Any additional agreements between partners regarding the use of the syntax rules in conformity with ISO 9735.

However if an error is detected at the **application level** which prevents its complete processing an APERAK message should be sent to the original message issuer giving details of the errors encountered. An APERAK message can be used to acknowledge the received message giving also the reasons for the acknowledgement. That is why under normal circumstances at present the APERAK (ERIRSP, CUSRES) message is used to send an acknowledgement or to confirm receipt.

6. Messages used for competent authorities and private parties

6.1 ERIMAN

This message is not applicable for inland waterway authorities. The Customs in some countries have indicated that because of the diverse and different requirements and implementations of the local customs, usage of this message will at present be difficult.
For the reporting of the necessary permits regarding the cargo in case of waste, this message might be used whenever this is required by the competent authorities dealing with the transport of waste. At present there have not been requests or initiatives to use this message for this purpose.
The message will however be used by the commercial parties to report detailed information regarding the cargo carried and general information about the voyage of the vessel in one message.,

Details:

The manifest should be regarded as an inventory of the cargo on board of the respective ship.
Some functions of a manifest are:

1. Customs manifest,
2. Rhine Manifest,
3. General freight manifest,
4. Special goods manifest.

The ERIMAN message combines the possibilities to report cargo in transit, special cargo on board, cargo information to terminals, competent authorities and vessel\ operators. The ERIMAN is based on the EDIFACT message CUSCAR from the UN/EDIFACT D04A directory. The message implementation guide provides the information, structure, data and codes for the exchange of cargo related data in inland river transport between the vessel, its operator and or representative and the authorities charged with the task of controlling compliance with rules and regulations. It may be used for the implementation of electronic reporting of cargo towards Police, Customs and other involved Competent Governmental agencies. Use of manifest information can also be made to indicate that there is waste as cargo on board and that the necessary permits for the transport thereof are available.
It should be realised that the terms Cargo inventory report, Cargo manifest and e-Konnossement are for these guidelines synonymous.
The Customs Cargo Report message is the message that is used for the declaration of cargo on board of a vessel in accordance with the IMO FAL Form II requirements for sea going vessels. The message and the data model are maintained by the World Customs Organisation and the ERIMAN user guide has been discussed and corrected in accordance with the requirements of representatives of this organisation.

6.2 Voyage report

The function of this standard transport schedule and availability information message is to request transport schedule or availability information and or to answer to such a request. In line with the requirements of the maritime industry and with the usage of this standard message in the maritime environment, the voyage plan notification message ERIVOY can be used for inland waterways.
For inland waterways the voyage plan notification message ERIVOY is used as a message from a carrier, its agent or a ship to the responsible waterway authority and where applicable involved commercial parties or between the waterway authorities mutually, reporting a voyage plan and its particulars giving details of the voyage, ship, expected voyage details and expected passage of waypoints and other key passage points.

In other words:

- The function of this standard UN-EDIFACT IFTSAI Transport schedule and availability message is to provide a transport route schedule of a certain ship.
- One message relates to one voyage plan.
- The message incorporates the (legal) requirements regarding the notification of the planned route details of a ship to the waterway authorities.
- The voyage plan contains all details regarding the (planned) movement of the ship from the place of departure to the place of arrival at the first berth in the port area. More than one destination will be possible (in case of two or more ports as destination of a journey). Preferable a new updated voyage plan will be created after the arrival at a port or the first port of a journey.
- The responsibility for the definition of a waypoint lies primarily with the sender of the message so the skipper. It is possible to define less waypoints to be mandatory for voyages of a long distance. The carrier, its agent or the vessel will declare the ETA for those waypoints on a voyage which are considered essential to ensure a good overview of the chosen route.
- The message is used to report and update a voyage plan, expected voyage details and expected passage of waypoints and other key passage points
- The ERIVOY user manual gives details about the used codes and references in the message and the data to be provided to waterway authorities and between commercial parties.

The information can be used by waterway authorities to know in advance the arrival of a vessel at a certain location, by lock managers to enhance their operations, by fairway authorities to predict traffic density and by terminals and ports to know in advance expected traffic.

6.3 Passenger and crew-lists

This message is not applicable for inland waterway authorities. The terminals and port authorities in ports under the SOLAS ISPS regime have indicated that they will use this message to receive the details of the persons on board of vessels mooring alongside to satisfy the ISPS obligations. The message will facilitate the boarding of persons belonging on the ship and or the entry of terminals by persons destined for the ship.

Details:
This message may be exchanged between Captain/Skipper or Carrier (such as inland waterway operators) and Customs, Immigration, Police, ISPS Terminals or any designated authorities. The message is based on the UN PAXLST message and uses the 05A directory to ensure compatibility with the messages used in the sea ports.
The message is used to transfer passenger / crew data from a Customs, Immigration or other designated authority in the country of departure to the appropriate authorities in the country of arrival of the means of transport.
This is directly related to the ISPS and security requirements dealing with the identity of people.
The transfer of data may occur prior to arrival of the vessel at the place where controls may take place. This is to permit the designated authority at the place of destination to screen this data and take timely decisions related to the clearance of passengers and crew e.g. pre-arrival clearance.
The availability of passenger and crew information is especially important whenever search and rescue operations need to be carried out. So for calamity abatement purposes the availability of passenger and crew lists is crucial.
But the information is also required in terminals to provide the identity of the people on board for security purposes.
The PAXLST message is completely in line with the international standards and IMO recommendations pertaining to FAL Forms 5 and 6 IMO Crew list and IMO passenger list and the electronic exchange of information in accordance with the IMO Compendium. This message is also similar to the message used in the Airline industry.
For inland waterway transport this message should only be send on request of the respective competent authorities.

6.4 Ships stores declaration

This message is not applicable for inland waterway authorities. If there is a requirement to notify competent authorities of stores on board for instance the stores under bond than this message should be used. At present there have not been requests or initiatives to use this message for inland waterway transport.

Details:
In line with the IMO FAL Form 3 the EDI message INVRPT provides information on the bonded and other stores on board of the vessel. In accordance with the IMO FAL Convention, the Ships Stores Declaration shall be the basic document on arrival and departure providing information required by public authorities relating to ships stores. The information is meant for customs and other competent authorities dealing with the control and taxation of articles and the control over all the goods being under bond.
The message shall be used to transfer data about the stores on board from the ship to customs or any other designated authority whenever this is required by this authority.

6.5 Waste Disposal

The message to be used is the WASDIS message which is also used for the reporting of waste on sea going vessels This message is at present not directly applicable for inland waterway authorities. Some port authorities have indicated that vessels should start using this message to report the waste on board. It is the intention that this information will also be required by the competent authorities for inland waterways. At present a number of European studies are carried out to decide if and when this reporting should be introduced.

Details:
In line with the latest directives on handling and disposal of waste the rules for having such waste on board are being under revision.
It is to be expected that in accordance with maritime transport, also inland waterway vessels will have to report the waste on board towards the competent authorities.
The data in the message are in accordance with the MARPOL convention and in particular the data mentioned on the International Oil Pollution Prevention Certificate (IOPP) and the CCR treaty dealing with the collection and disposal of waste for the Rhine the Strasbourg treaty of 1996 updated in 2002.

The WASDIS message is used as follows

- A message to convey information on last inspection and / or waste and cargo residues on board of a vessel. (WASDIS)
- The message has been designed to enable control of pollution caused by a means of transport.
- The message relates to one means of transport and can be send from the vessel or its agent to the competent authorities or can be used for exchange of information between authorities mutually
- The message shall be used to report data about the ships waste and oil residue on board from the ship to the competent authority or any other designated authority whenever this is required by such authority.
- The message is based on the legal requirements regarding the notification of ship-generated waste and cargo residues by an agent/operator/master of a vessel to the competent Port respectively Waterway Authority.
- The message is based on and supports the implementation by means of EDI of the European Directive on Port Reception Facilities for ship-generated waste and cargo residues (Directive 2000/59/EC of the European Parliament and Council, dated 27 November 2000).
  N.B. This may mean that in a certain port the condition for a segment (group), data element (or qualifier) that is conditional according to this specification, becomes mandatory for that (port) authority.
- The message caters for the provision of sending a Replacement or a Cancellation of a previously sent Original message. Also a Pre-advice of items requiring further information can be send.
  The message can also be used as an inter-port (or inter-authority) message (e.g. between competent waterway authorities or port authorities).
- The message content is uniquely identified by means of the message reference (in BGM 1004) and the message sender identification (in NAD (MS) 3039). All other identifying data, such as the identification number of the vessel (IMO number), radio call sign or voyage number, are secondary references pointing to data outside the message. The sending of replacements and updates also makes use of this principle.
- This message implementation guide is based on the PROTECT WASDIS 2.0 implementation guide. The respective authorities have agreed to use the PROTECT guidelines whilst applying the following rule: data not required (or treated) locally in a port, may be sent as long as it is in accordance with this Message Implementation Guide.
  To minimise implementation differences for different places it is advised to supply as much of the required information as possible in each WASDIS message enabling the authorities to receive all data necessary to cover the local requirements.

6.6 Invoice

The function of this standard message for invoicing is A message claiming payment for goods or services supplied under conditions agreed between the seller and the buyer. The United Nations Standard Invoice Message, with correct data qualification, serves also as the specification for Debit Note and Credit Note messages. Throughout this document, the reference to 'Invoice' may be interpreted as conveying the wider meaning of 'Invoice/Credit Note/Debit Note'.

- Field of application

The Invoice message may be used for both national and international applications. It is based on universal practice related to administration, commerce and transport, and is not dependent on the type of business or industry.

- Principles

- A party may invoice for one or more transactions

- An invoice may refer to goods, items or services related to one or more orders, delivery instructions, call-offs, etc.

- An invoice may contain references to payment terms

- An invoice for cross border transactions may contain additional information for customs and/or statistical purposes/services

- An invoice may contain transport details.

- Segment clarification

- This section should be read in conjunction with the segment table which indicates mandatory, conditional and repeating requirements.
- The following guidelines and principles apply to the whole message and are intended to facilitate the understanding and implementation of the message:
- All specified dates/times should be in the format 'ccyymmdd'/'hhmm' unless all parties involved in the transaction agree that there is a functional requirement for an alternative format. Periods should be specified as whole numbers representing the required period as indicated in the format qualifier (weeks, months, etc.)
- Where a choice of code or text is given only the code element should be used wherever possible.
- Conditional data that is not required in the message should not be included.
- Care must be taken that the segment qualifier in dependent segments do not conflict with the segment qualifier of the rigger segment of a group.
- Free text information within the message should be avoided as this inhibits automatic processing.

7. Commercial messages

There are quite a few standard commercial messages in existence dealing with booking, stowage, transport instructions, and container management. In this paper these messages are not discussed however quite often these messages do serve as input information for the messages exchanged with the competent authorities. Good examples are the IFTMIN which is an transport instruction, the stowage plan (BAPLIE) and all container related messages.

7.1 IFTMIN

The International Forwarding and Transport Instruction (IFTMIN) message may be used for both national and international applications. It is based on universal practice related to administration, commerce and transport, and is not dependent on the type of business or industry.

1 Principles

The instruction results in a transport contract for a consignment and is primarily meant for administrative purposes.

It will be the message from shipper to carrier or forwarder containing the final details of the consignment for which services are provided. The instruction message is the one and only message which results in the actual contract for transport which can either be a document or an electronic contract.

If only one message will suffice in an exchange between a shipper and a carrier/forwarder the instruction message should be the one as this message is the only message that results in the contract.

2 Clarification

- A consignment may contain several goods items.
- Goods items may or may not be containerized.
- A goods item may be transported in one or more containers, and a single container may contain one or more goods items.
- One goods item may be related to one or more customs tariff codes.
- Goods items related to one customs tariff code may be carried in one or more containers.
- Goods items may reflect either the contractual or operational description of the goods.
- A party to the movement of the consignment may book or order transport for one or more goods items.
- Pre-carriage (advanced haulage) and/or on-carriage (destination haulage) of goods items or equipment within one booking or instruction may take place in different steps, each step specified with its own transport details group.
- Equipment may have other types of equipment attached to it, e.g. a temperature control unit attached to a container.
- Equipment and/or goods items may be attached to or transported on another load or transport device, which as such may be attached to or transported on yet another load or transport device, e.g. a container on a chassis on a rail-car.

- Transport devices, which have the ability of powered movement on their own, are specified in the transport details group. Other load or transport devices are specified as equipment.
- The expression of packaging for goods items can be expressed at up to three levels.

3 Usage of the IFTMIN (BICS) message for Inland shipping

In the inland shipping industry the IFTMIN-BICS message is at the heart of electronic data interchange (EDI) between logistic partners in inland shipping.
The IFTMIN-BICS message serves as the core EDI message between different actors connected to the domain of inland shipping. Whilst also the IFTMIN-BICS message provides all the necessary data to enable EDI between inland shipping with their partners and the respective competent authorities.
The IFTMIN-BICS message is used by the industry as this message is completely in line with the applicable UN-standards for instructions in the transport of goods and equipment.
The choice for IFTMIN-BICS as the prime standard for EDI instructions for inland shipping is based on the following grounds.

- The inland shipping industry has a vital interest in seamless transfer of information through the entire transport chain. This contributes highly to the quality and reliability of the inland waterborne transport product as an individual shackle in the transport chain and the transport chain as a whole.

- With IFTMIN-BICS all necessary information can be supplied from customer (agent, barge operator initiating the transport) to vessel, which is needed for a safe transportation of cargo whether this cargo is dangerous or not or loaded in containers or not.

- After receiving and processing this information a skipper cannot only take care of safe and secure transport, he also has all the necessary data to inform authorities.

- The IFTMIN-BICS-message is at the very heart of several electronic transport documents like E-manifest, electronic Bill of Lading, load and discharge instructions and serves as the basis for electronic reports to fairway- and other authorities.

- In this way it is possible to deliver all desired information in a uniform structure to commercial partners (consignees, shippers, terminals and barge operators) as well as to authorities (fairway authorities, police, customs, port authorities).

- With respect to the application of security measures (ISPS) the actual use of information from and to ships obtained by IFTMIN-BICS messages will play an indispensable role for all those who need to provide information. To meet the information requirements of other parties involved IFTMIN BICS provides skippers with the only manageable way of providing good quality data.

By using international standards like IFTMIN-BICS less changes in in-house software of participating actors are necessary. This will stimulate the acceptance and the use of Electronic Data Interchange in the inland waterway transport environment.

7.2 BAPLIE

The EDIFACT Bay-plan (Stowage plan) "BAPLIE" will be used to transmit information about all occupied places onboard of a vessel to interested parties like the ship owner and the terminal operator in the next port of call. The message is also suitable to transmit information about empty places but this feature will not be used in the foreseeable future.

In general only complete messages "BAPLIE" will be transmitted, whereby only the occupied stowage locations, either by equipment or special cargo (break-bulk), should be mentioned. Alternatively it may be agreed between EDI-partners to transmit only details about containers handled in a certain port or terminal to for instance a central planning office to insert than in a master stowage plan.

Principle

The message will be transmitted to the terminal operator in the next port of call, who will then be able to extract all information relevant to the terminal operations from the message.
Subsequently the information about equipment discharged from the vessel on the terminal will be removed from the stowage plan, and information about equipment loaded at his terminal will be inserted and the location of equipment shifted at his terminal will be changed in the original bay-plan.
Upon sailing of the vessel the responsible party will then transmit the updated bay-plan-message to the ship owner, tonnage center and/or the terminal operator in the next port of call, as per the instructions of the ship owner. The message can be transmitted to the vessel electronically or by any data carrier eliminating the use of the paper "master" bay-plan.
In case complete 'master' bay-plans are being transmitted the receiving party should ensure that all data for the so-called 'remain on board' cargo is kept intact for re-transmission to the next port.

7.3 CODECO

The UNEDIFACT standard Gate In / Out Message the CODECO message will be used to submit the report from a load terminal to an inland navigation vessel about the particulars of the loaded containers after they have been loaded on board. The message is part of a total set of container-related messages.
These container messages serve to facilitate the intermodal handling of containers by streamlining the information exchange. The business scenario for the used container messages is clarified in a separate document.
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Details of the CODECO message:

A message by which a terminal, depot, etc. confirms that the containers specified have been delivered or picked up by the inland carrier (road, rail or barge). This message can also be used to report internal terminal container movements (excluding loading and discharging the vessel) and to report the change in status of container(s) without those containers having physically been moved.

Principles of the CODECO message:

Business area:
Pre- and on-carriage transport of containers/equipment.

Sending functions include:
Inland load terminal, Container depot, Container freight station

Receiving functions may include:
Inland Carrier, Barge Operator, Logistic centre, Shipper, Freight forwarder

The following guidelines, rules and functionality apply to the Container gate-in/gate-out report message:

* The message contents can be uniquely identified by a combination of the following data elements:
- ordering customer, coded (NAD)
- ordering agent / operator, coded (NAD)
- container announcement reference (being the release order reference number or the acceptance order reference number) (RFF)

The ordering customer operator / agent, coded is needed to supplement the unique identification only in the next situation: the agent
acts on behalf of several ordering customers issuing the same
range of reference numbers for each customer.
E.g. the ship's agent /'operator acts on behalf of several shipping lines
issuing for each shipping line the same range of numbers.

* A copy of this message may be sent e.g. to the, freight forwarder respectively the barge operator in accordance with the communication addresses as mentioned in the Container announcement.

* One message may contain several containers.

* A supplementary container reference (container sequence number) is used to refer to the information of the container(s) in the Container announcement, if the container identification (prefix and number) was not completed in that message.

* An indicator for the transport status (i.e. export, import, transhipment or continental) is to be completed on container level (EQD-segment).

* One shipping line (operator) can be specified on message level.

* The vessel and voyage number can be specified on message level.

* Transport details can be specified for each individual container.

* For each container its place of discharge or its position of loading (stowage cell) in/on the means of inland transport can be specified.

* In case of export the port of discharge and any port of transhipment can be specified for each individual container.

* For each container seals can be specified affixed by the shipper, Barge operator, container freight station, terminal, Sea carrier and Customs.

7.4 MOVINS

The UN/EDIFACT standard MOVINS message is the message send by the inland waterway vessel (Skipper) to the load terminal indicating the required stowage after reception of the transport instruction.

Function:
A Stowage instruction message contains details of one means of transport, inland waterway vessel, giving instructions regarding the loading, discharging and re-stowage of equipment and/or cargo and the location on the means of transport where the operation must take place.

Principles:
The Stowage instruction message may be used for both national and international applications. It is based on universal practice related to administration, commerce and transport, and is not dependent on the type of business or industry.
In the shipping industry the Stowage instruction message can be used between partners involved in the loading and discharging of vessels and other means of transport, parties are skippers, stevedores, tonnage centres, etc.

7.5 COPINO

The UN/EDIFACT standard COPINO message is the message send by the Barge Operator to the Load terminal giving a pre-arrival notification of the containers to be expected for an inland waterway vessel, based on the information of the transport instruction send by the shipper.
The standard provides the definition of the Container pre-notification message (COPINO) to be used in Electronic Data Interchange (EDI) between trading partners involved in transport.

Functional definition:

A message by which an inland carrier notifies of the delivery or pick-up of containers.
This message is part of a total set of container-related messages. These messages serve to facilitate the intermodal handling of containers by streamlining the information exchange.
The business scenario for container messages used for inland waterway transport is clarified in a separate document,

Field of application:
The Container pre-notification message may be used for both national and international applications. It is based on universal practice related to transport, and is not dependent on the type of business or industry.

Principles:
Business area:
Pre- and on-carriage transport of containers/equipment

Sending functions include:
Inland carrier, Barge operator

Receiving functions include:
Container terminal, Container depot, Inland terminal, Container freight station,

The following guidelines, rules and functionality apply to this Container pre-notification message:

* The message contents can be uniquely identified by a combination of the following message top level data elements:
  - operating inland carrier, coded (TDT)
  - mode of transport (TDT)
  - inland voyage number/indication (TDT)

* The container announcement reference (being the release order reference or acceptance order reference), in combination with:
  - the Ordering customer, coded,
  - the Agent of the ordering customer
  can be used to refer to information in the Container announcement message.

* An extract of this message can be sent to the Ordering customer (agent) of the Container announcement, e.g. Shipping agent, Logistic center and Freight forwarder, for their information. The Container pre-notification will be split up in as many messages as there are different Ordering customers (agent) of the Container announcement message.

* A message is to be set up for each call (inland waterways) of a means of inland waterway transport.

The expected arrival date and time can be given once (on message top level) for the means of transport as a whole.

* One message may contain several containers.

* For each container its size and type can be specified, including prefix and number if known.

* If the container prefix and number is unknown, a supplementary container reference (Container sequence number) is used to identify a container (group) in the message.

* An indicator for the transport status (i.e. export, import, transhipment or continental) is to be completed on container level (EQD-segment).

* Main transport details can be specified for each individual container.

(Note: The inland transport is on message level in the COPINO as the inland transport means is being pre-notified to arrive to either pick-up or deliver containers for or from different main-carriages.)

* The final place of positioning can be included in case of routing via an inland terminal or several container freight stations (for stacking purposes).

* The temperature and dangerous goods information can be specified for each goods item which can be related to the corresponding containers by linking the goods item group (GID) to the container details group(s) (EQD) by means of the SGP segment.